

**REMARKS**

Claims 1-6 and 10-41 are pending in this application, of which claims 3 and 16-37 have been withdrawn. By this Amendment, claims 1-4, 10, 11, 14, 16-18, 29-30 and 38-40 are amended, claims 7-9 are canceled, and claim 41 is added. Claim 1 is amended to include a means for calculating an amount of oxygen poisoning and to recite that the air-fuel ratio is switched when the calculated amount of oxygen poisoning exceeds a predetermined allowable value. Support for the amendments can be found, for example, at page 18, line 24 to page 19, line 6 of the specification as filed. Claims 1-4, 10, 11, 14, 16-18, 29-30 and 38-40 are amended to address antecedent basis and clarity. No new matter is added.

**I. The Claims are Patentable Over the Applied References**

The Office Action (1) rejects claims 1, 2, 4, 7, 8 and 10-14 under 35 U.S.C. §102(b) over U.S. Patent No. 5,577,382 to Kihara et al. (Kihara); (2) rejects claims 5 and 9 under 35 U.S.C. §103(a) over Kihara in view of U.S. Patent No. 6,148,612 to Yamashita et al. (Yamashita); (3) rejects claim 6 under 35 U.S.C. §103(a) over Kihara in view of U.S. Patent No. 5,315,823 to Nishikawa et al. (Nishikawa); (4) rejects claim 15 under 35 U.S.C. §103(a) over Kihara in view of U.S. Patent No. 6,562,753 to Miyoshi et al. (Miyoshi); (5) rejects claim 38 under 35 U.S.C. §103(a) over Kihara; and (6) rejects claims 39 and 40 under 35 U.S.C. §103(a) over Kihara in view of U.S. Patent No. 6,634,345 to Yoshizaki et al. (Yoshizaki). Applicants respectfully traverse the rejections.

Regarding independent claim 1, Kihara fails to disclose a "means for calculating an amount of oxygen poisoning of the precious metal catalyst based on an oxygen concentration in the exhaust gas and a temperature of the exhaust purification catalyst, the air-fuel ratio of the exhaust gas being switched from lean to rich when the calculated amount of the oxygen poisoning exceeds a predetermined allowable value." This feature is similar to features recited in prior claims 7-9.

While the Office Action, regarding prior claims 7-8, cites to Kihara at col. 13, lines "35+" and col. 14, lines "1+", Kihara fails to disclose the feature quoted above because Kihara discloses that changing the air-fuel ratio of the exhaust gas from lean to rich occurs when the "cumulative running distance"  $X_{SP} \geq X_0$ , a set value (col. 14, lines 55-61). That is, while Kihara discloses changing the air-fuel ratio based on the cumulative running distance, Kihara fails to disclose that the ratio is changed in response to a calculated amount of oxygen poisoning determined based on oxygen concentration in an exhaust gas and a temperature of the exhaust purification catalyst, as claimed.

Similarly, regarding prior claim 9, the Office Action cites to Yamashita. However, Yamashita discloses an air / fuel (A/F) sensor 16 (Fig. 1) and a NO<sub>x</sub> catalyst 19 that is an occlusion and reduction type catalyst (col. 4, lines 1-2). Yamashita further discloses alternating lean and rich mixtures of the exhaust gas by controlling the lean time LT and rich time RT to maintain the NO<sub>x</sub> purification rate above 95% (Fig. 3; col. 5, line 38 to col. 6, line 12; Fig. 5). Thus, Yamashita fails to disclose that the ratio is changed in response to a calculated amount of oxygen poisoning determined based on oxygen concentration in an exhaust gas and a temperature of the exhaust purification catalyst, as claimed. The other applied references applied against dependent claims, fail to cure the deficiencies of Kihara.

For the foregoing reasons, Applicants respectfully request withdrawal of the rejections.

## II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: November 5, 2008

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